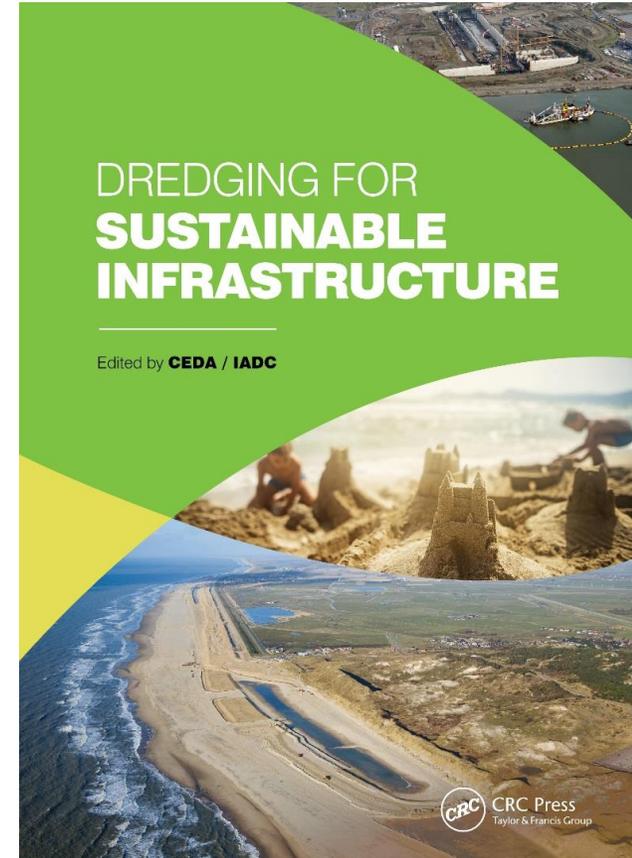
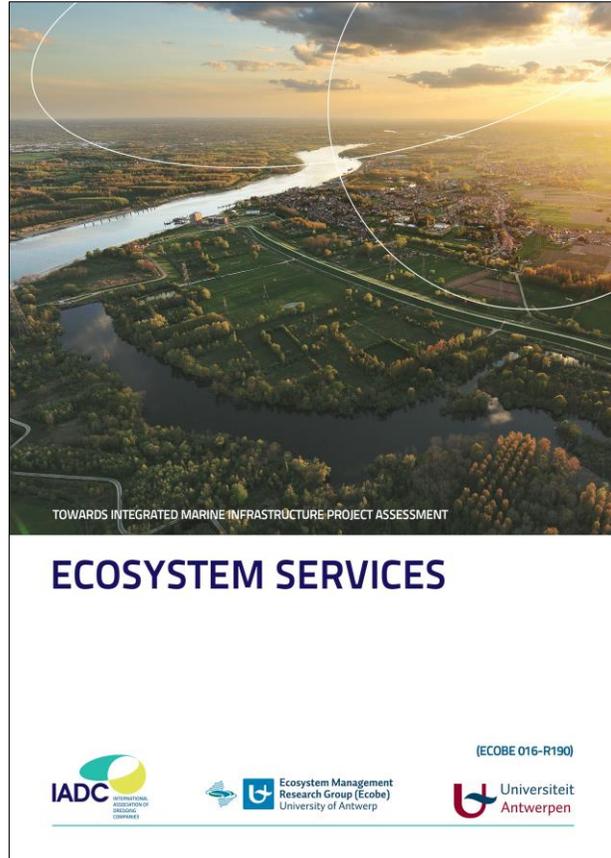


# Why Sustainability Assessment of Port Projects Matters



# KNOWLEDGE DEVELOPMENT



# BOTANY BAY, SYDNEY PORT EXPANSION



- 2011
- 63 hectares of reclaimed terminal land
- construction of 1.85 km of shipping wharves with deep water berths



- Penrhyn Estuary Habitat enhancement
- Foreshore beach development

# BOTANY BAY, SYDNEY PORT EXPANSION

Bay: -63 ha



Quay: +1850m



Rock rubble: +2 ha



Mangrove: -1 ha



Port Botany Expansion



Intertidal sand and mudflats: +8.3 ha

Shrub: -11 ha



Saltmarsh: +2 ha



Seagrass: +6 ha



# BOTANY BAY, SYDNEY PORT EXPANSION

Qualitative, quantitative and/or monetary assessment

## Opportunities for transportation

+8,000 TEUs/y port capacity

## Recreation

Enhanced with the recreation plan

## Climate regulation

Capacity: -56 tonC/y	-12,320 €/y
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## Fish production

Increase nursery area

## Port Botany Expansion



## Water quality regulation

Capacity: -2,223 kgN/y +120 kgP/y	-82,277 €/y
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## Biodiversity

Positive impact on shorebirds is expected

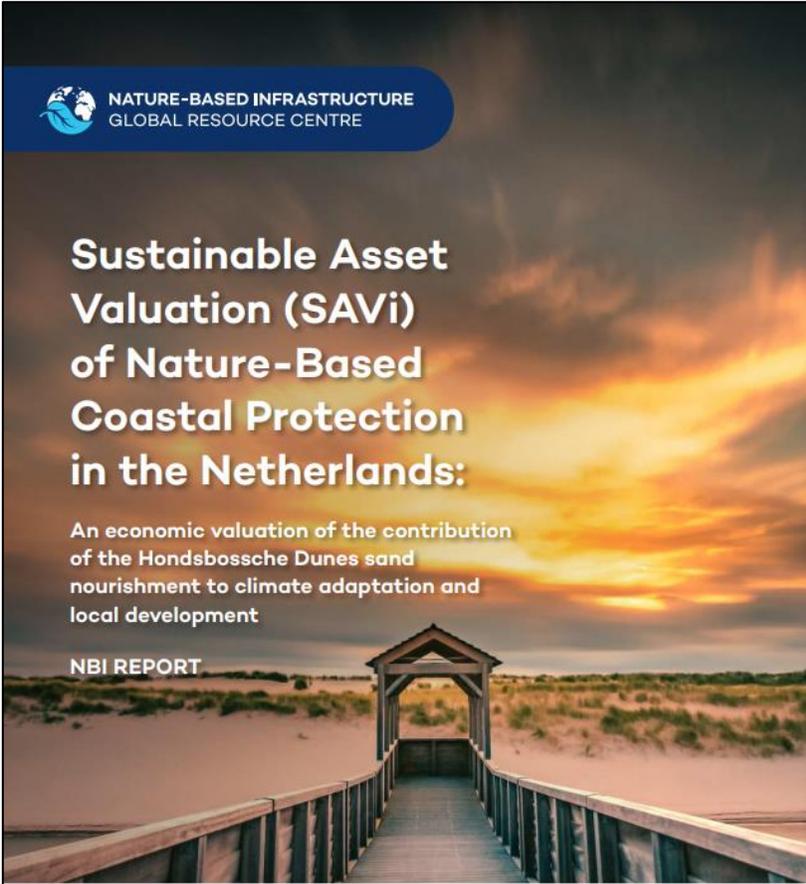
## Sedimentation /erosion regulation

Capacity: +3350 m <sup>3</sup> /y	
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## Air quality regulation

Capacity: -312 kgPM <sub>10</sub> /y	-18,848 €/y
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# HONDBOSSCHE SEA DUNES



 NATURE-BASED INFRASTRUCTURE  
GLOBAL RESOURCE CENTRE

## Sustainable Asset Valuation (SAVi) of Nature-Based Coastal Protection in the Netherlands:

An economic valuation of the contribution of the Hondsbossche Dunes sand nourishment to climate adaptation and local development

NBI REPORT

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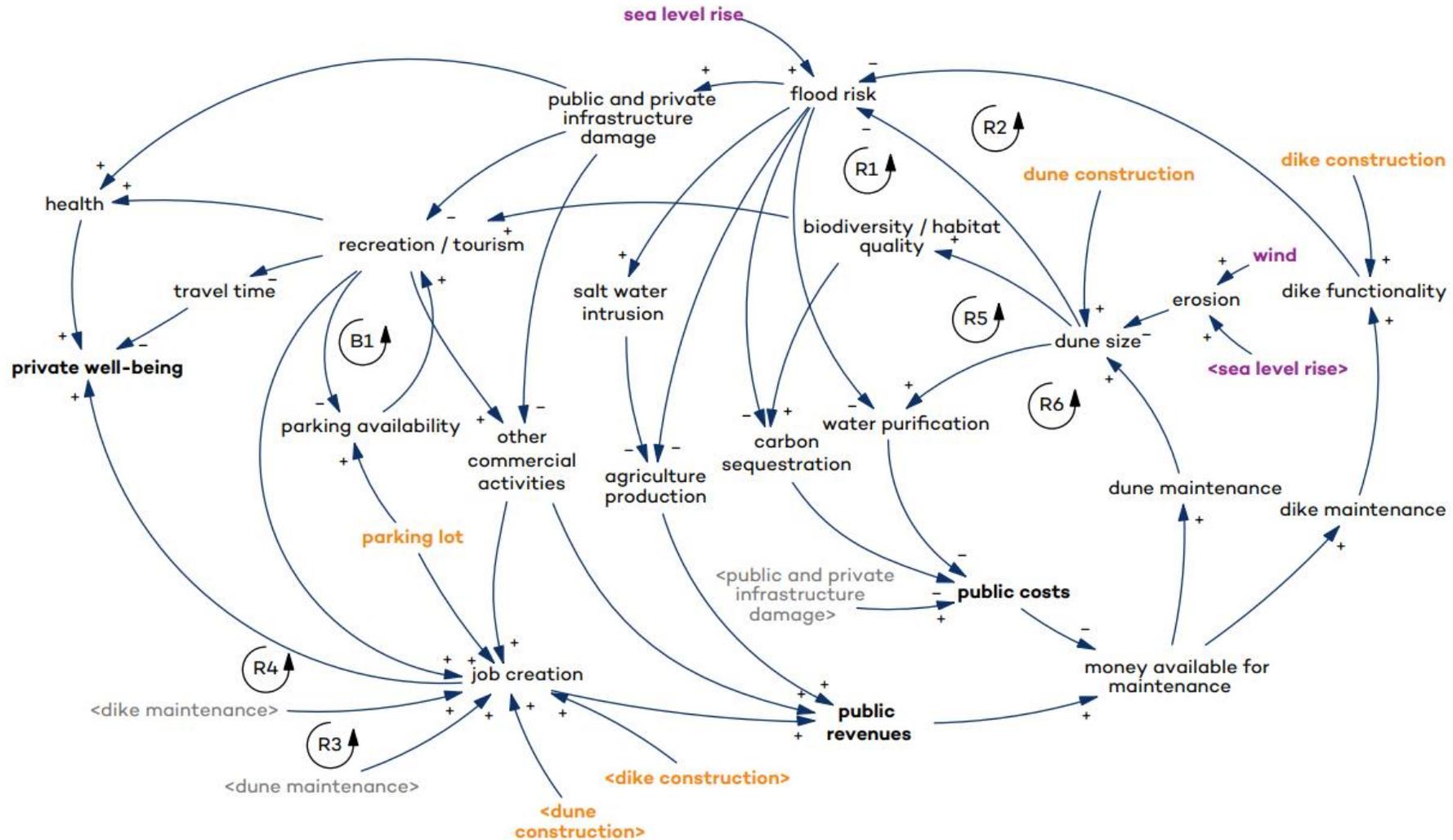
December 2021

<https://www.iadc-dredging.com/webinar/benefits-sea-dunes-hondsbossche/>

# HONDBOSSCHE SEA DUNES



# HONDBOSSCHE SEA DUNES, CAUSAL LOOP DIAGRAM



# HONDBOSSCHE SEA DUNES



# THE VALUATION OF EXTERNALITIES IN MARITIME INFRASTRUCTURE PROJECTS



<https://www.iadc-dredging.com/tag/complete-issue-165/>

<https://www.iadc-dredging.com/article/valuation-externalities-maritime-infrastructure/>